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NAVAL POSTGRADUATE SCHOOL

Monterey, California

1990 NAVAL AVIONICS CENTER
SCIENTIST AND ENGINEER
PROFILE

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Prepared for: Naval Avionics Center
Indianapolis, IN 46219-2189

NAVAL POSTGRADUATE SCHOOL
Monterey, California

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The purpose of this project is to assess the factors affecting job related satisfaction and career orientation and development of the scientist and engineer communities at the Naval Avionics Center.

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1990 NAVAL AVIONICS CENTER

SCIENTIST AND ENGINEER

PROFILE

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I. INTRODUCTION

A. OBJECTIVES AND BACKGROUND

Personnel turnover has become a major concern to those who have an interest in organizational behavior. Turnover results in considerable costs to individuals as well as organizations. Consequently much research concerning the phenomena of turnover has been done, including studies on both civilian and military communities. Many of these studies have concentrated on the role played by job satisfaction in the turnover process.

The loss of experienced personnel creates "holes" in the organizational structure that must be filled by enticing an additional experienced individual to remain with, or join, the organization. Attrition also has a "domino effect" on initial recruiting and retention of personnel, because upper level vacancies move down the organizational hierarchy as personnel are promoted upwards to fill them. This practice exacerbates the training problem by creating more vacancies, which requires more training of personnel to fill them, which costs money and involves a substantial amount of administration. Eventually, the vacancy reaches the bottom of the hierarchy, where it is then filled by a fresh recruit. Civilian organizations can fill vacancies using lateral entry replacements who may already possess the skills

required for the position to be filled. Of course some amount of attrition is necessary and expected; however to minimize manpower costs, the attrition of dedicated experienced personnel should be minimized.

Turnover is a complex subject. To say that the decision to stay or leave a particular work place can be explained or predicted by the relationship between one or two variables is simply avoiding evidence that states otherwise. The literature supports the contention that turnover is related to age (or tenure), demographic, economic, satisfaction, and commitment factors, as well as expectations concerning alternative employment and certain aspects of one's current job. In addition, it appears that the decision is not truly an individual one, since the perceptions of family members (or significant others), and peers, can influence the process. This further complicates the picture, since it is difficult to model or measure the effects of such influences.

The majority of the research surrounding civilian turnover focuses on the relationship between satisfaction or commitment and turnover, as moderated by tenure, phase of life, or economic conditions. Little mention is made regarding the influence of biographical factors such as marriage or number of dependents. It is likely that these factors do influence the civilian turnover decision.

Specifically, the goal of this project is to assess the factors affecting job related satisfaction and career

orientation and development of the scientist and engineer communities at the Naval Avionics Center.

B. THE NAVAL AVIONICS CENTER

The Naval Avionics Center is located in Indianapolis, Indiana. As of March 1989, the Naval Avionics Center employed 3,320 permanent civilian personnel, 1149 of which were degreed scientists or engineers. The vast majority of these personnel are found in five of the nine departments that comprise the Center's organization. (A basic organization chart is provided as Appendix A.) These departments are "200" (Manufacturing Technology), "400" (Product Integrity and Assurance), "700" (Technical and Operations Support), "800" (Systems and Technology), and "900" (Engineering). As civil servants, they are salaried employees who are paid on standard regional government GS/GM pay scales.

The Center's mission is "to conduct research, development, engineering, material acquisition, pilot and limited manufacturing, technical evaluation, depot maintenance, and integrated logistic support on assigned airborne electronics (avionics), missile, space-borne, under sea and surface weapon systems and related equipment" [Naval Avionics Business Plan]. It is a subordinate command of the Naval Air Systems Command and is typical of many large military industrial facilities, in that it has a small military staff (13 in this case) responsible for a large

civilian labor force. Although it is t[illegible]ally a government facility, the Center competes for much of its work using the standard competitive bidding procedures for government contracts. Those departments that are "light-loaded" may even accept outside work. In these respects, the Center is much like any privately operated industrial activity.

As part of an organizational effectiveness study of the Naval Avionics Center being conducted by the staff of the Naval Postgraduate School Administrative Science Department, the issues of job facet satisfaction and career development, particularly of engineers and scientists, were identified as concerns by the staff. As expressed in the Center's own overview statement

> the Center invests in a strong personnel training program designed to foster technical and managerial skills especially attuned to addressing the Navy's airborne electronics issues of today and tomorrow. In order to stay abreast of new philosophies in the systems acquisition process and the rapid advances in avionics technologies, the Center continually invests in the upgrading of its personnel's capabilities.
>
> As a result of these resource investment strategies, the Center has assembled an impressive array of professional and skilled personnel combined with well-equipped physical facilities. [Naval Avionics Business Plan]

In light of this personnel philosophy, which involves substantial investments in training and experience, turnover has an especially devastating effect on the Center's ability to stay abreast of technology and exploit the very strategy that it is attempting to build upon. Therefore, job related

aspects which affect turnover and the turnover decision are of direct concern to personnel managers.

Although the Center does administer "leaver surveys" to departing employees, this data is not systematically retained and analyzed in any files. As a result, there is little or no useful historical data for use as a reference to determine the basic reasons for turnover or retention at the Center. This also makes it next to impossible to determine the demographics of those leaving the Center, in terms of age, experience, and training. Figures on overall turnover are available, and they indicate that in the first two quarters of fiscal year 1989, attrition of engineers and scientists was running at 6.1 percent, 63 percent of which was due solely to voluntary resignation. Recruitment to replace those personnel leaving the Center is done on a piecemeal basis, with recruits being procured as vacancies occur.

II. METHODOLOGY

Several studies have noted direct relationships between stated intention to quit and turnover behavior. Additional studies have identified various economic, satisfaction, and biodemographic factors that influence the turnover process.

In order to study projected turnover and its determinants at the Naval Avionics Center, a survey was administered to a representative sample of the population. (A copy of the survey is provided as Appendix B.) The survey was developed using the 1985 DOD Survey of Officer and Enlisted Personnel and the Naval Personnel Research and Development study Prediction of Turnover Intentions Among Civilian Engineers Employed at Navy Industrial Facilities [NPRDC, 1981] as a basis for constructing questions to measure those factors deemed relevant by the literature. In most cases the questions were taken word for word from the references, however, there were some questions that were reworded to make them more specific to Naval Avionics. Another difference in the survey developed for administration at the Center is that in all questions requiring scaled answers, the respondents used a five point or seven point Likert type scale for their response. The DOD Survey used five point, seven point, and

ten point scales, which often seemed confusing. In the interest of ease and consistency, as well as the absence of any requirement for finer measurement in the responses, the five and seven point scales were used throughout the survey. In addition, in order to ensure consistent answers, some questions were asked in two different ways. The answers were checked for consistency and no deviations were found.

The survey sample was chosen by the staff at the Naval Avionics Center. The only requirement asked of the Center was that respondents possess at least two and not more than 14 years of federal service at the Center, and that the sample be selected randomly, and representative of the distribution of engineers and scientists at the Center. The Center attempted this by first determining the number of engineers and scientists in each department, and then proportionally allocating 200 surveys throughout the organization. The result was a stratified random sample. The surveys were administered through representatives in each department, and collected either by the researchers on the site or by the personnel office. The survey was completely confidential. No identifying marks were requested or used, and to ensure confidentiality, the respondents were provided with a large manila envelope and asked to return the survey inside the sealed envelope.

Of the 200 surveys disseminated, 174 were returned, which equates to a response rate of 87 percent. The survey was

administered to male and female respondents. Responses were manually entered into a computer database for analysis.

Frequency analysis was conducted to determine the relative feelings of the respondents for each area sampled. These findings were then used, along with analysis of means, to compare group responses for males, females, and by department. In the analysis sections that follow, five different areas are analyzed: demographics, job related factors, work group factors, general factors, and career development factors. Each section has frequency distribution tables for it's particular questions, along with numerical analysis of the tables. At the end of each section is a section summary.

III. DEMOGRAPHICS

This section profiles several important demographic characteristics of the sample population at the beginning of fiscal year 1990.

A. AGE (AGE)

The mean age of the entire sample was 32.2 years. The youngest respondent was 24 years old, the oldest was 63. The distribution of ages exhibited a negative skew, as the sample population tended towards younger ages-- the vast majority (85%) were between the ages of 25 and 40. Table 1 shows the frequency distributions, for age, of the overall sample, males only, females only, and by department.

TABLE 1
AGE DISTRIBUTION (%)

		Gender		Department				
Age Group(yrs)	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	32.2	32.6	29.8	32.1	31.4	35.5	29.5	32.7
under 25	3	3	0	0	4	0	2	7
25-30	44	45	73	52	44	33	74	37
31-35	27	28	15	35	30	26	15	34
36-40	12	10	8	4	11	15	9	9
over 40	14	14	4	9	11	26	0	23

As can be seen, the male population closely parallels the overall sample, as 85% of the sample is male. The female population tends to be younger than the male population (mean age 29.8 versus 32.6), with less than half as many over 36 personnel and a

much larger proportion of under 30 personnel. Department 800 is the youngest of the departments, while department 700 is the oldest, with a mean age of six years more than 800.

B. GENDER (GENDER)

Table 2 shows the gender distribution by department. In the overall sample, 85% of the respondents were male.

TABLE 2
GENDER DISTRIBUTION (%)

		Department				
Gender	overall	200	400	700	800	900
n	174	23	27	27	46	45
Male	85	78	82	100	83	84
Female	15	22	18	0	17	16

The department 700 sample was comprised entirely of males. Department 200 had the largest proportion of female respondents. Eight of the respondents did not indicate the department worked for.

C. MARITAL (MARRY) and DEPENDENTS (DEP) STATUS

Table 3 indicates that 67% of the sample was married. Females were more likely to be married than males. Departments 200 and 800 had the largest married populations, department 400 had the smallest.

Table 4 provides the distribution of non-spouse dependents. Over half of the sample population had no dependents. Males were more likely than females to have dependents. Department 900 personnel were the most likely to have dependents, department 800 the least likely.

TABLE 3
MARITAL STATUS DISTRIBUTION (%)

		Gender		Department				
Marital Status	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
Married	67	66	73	74	56	59	72	67
Not married	33	34	27	26	44	41	28	33

TABLE 4
DEPENDENT DISTRIBUTION (%)

		Gender		Department				
Dependents	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
Have dependents	46	48	35	44	44	44	37	56
No dependents	54	52	65	56	56	56	63	44

D. EDUCATION LEVEL (EDUC)

Every respondent in the sample possessed at least a bachelors degree. Masters degrees were held by 13%, doctoral degrees by 1%. Females tended to be more highly educated than their male counterparts, with more than twice the percentage of postgraduate degrees. Department 700 had the most highly educated population, department 900 had the only doctorates. Table 5 presents the education level

distribution. Note that a score of 3 is equivalent to a B.S. degree, 4 is an M.S. degree, and 5 is a PhD.

TABLE 5
EDUCATION LEVEL DISTRIBUTION (%)

		Gender		Department				
Degree held	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.2	3.1	3.3	3.1	3.1	3.2	3.1	3.1
BS (=3)	86	88	73	91	85	78	87	91
MS (=4)	13	11	23	9	15	22	13	7
PhD (=5)	1	1	4	0	0	0	0	2

E. YEARS OF SERVICE (LOS)

The mean length of service at Naval Avionics was 6.3 years. The distribution was negatively skewed, with a majority of the respondents having less then six years at the Center. Males tended to have longer service than did females by an average of 0.7 years. All of the respondents with at least 13 years of service were males. Department 900 had the most senior work force; 22% had at least 10 years of service and over 40% had at least seven years at the Center. Department 700 had the least senior work force, with 85% having been at the Center for less than six years. Table 6 presents the length of service distribution.

TABLE 6
YEARS OF SERVICE DISTRIBUTION (%)

		Gender		Department				
Years of service	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	6.3	6.4	5.7	6.3	6.1	5.2	6.1	6.7
<=3	21	22	19	17	26	30	13	24
4-6	43	41	50	44	26	55	57	34
7-9	20	20	23	30	33	8	19	18
10-12	12	12	8	9	15	4	9	15
>=13	4	5	0	0	0	3	2	9

F. PAYGRADE (PAYGR)

Table 7 presents the distribution of paygrades. A majority of the sample were at the GS-11 or GS-12 level, with a mean of GS-11.6. A bottleneck appears between GS-12 and GS-13, with 47% of the sample at the former and only 5% at the latter. Males tended to have higher paygrades than females, with more than half of the females at GS-11 and only 4% at the GS-13 or above level and more than half of the male population at GS-12 or above. All GS-13 and above billets were filled by males.

TABLE 7
PAYGRADE DISTRIBUTION (%)

		Gender		Department				
Paygrade	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	11.6	11.6	11.5	11.3	11.7	11.8	11.6	11.6
9	2	3	0	4	4	0	2	0
11	43	41	54	61	22	37	41	55
12	47	48	42	26	74	56	52	36
13	5	5	4	9	0	4	4	7
>13	3	3	0	0	0	3	0	2

G. EXPECTED LENGTH OF SERVICE (XPECTLOS)

The distribution for expected additional years of service at Naval Avionics is presented in Table 8. The distribution exhibits a negative skew, with a majority (66%) of the sample population expecting to work at the Center less than six more years. Interestingly, for all sample groups, a significant proportion (15-22%) intend to remain at the Center for at least 15 more years. This probably equates to retirement. Department 200 has the lowest average expected additional service, 6.5 years; while department 700 has the highest, 7.4 years, or almost one full year more.

TABLE 8
EXPECTED YEARS OF SERVICE DISTRIBUTION (%)

Expected		Gender		Department				
Years of service	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	7.2	7.2	7.2	6.5	7.1	7.4	6.9	7.2
<1	9	10	4	5	7	4	12	11
1-3	33	31	44	45	34	33	32	30
4-6	24	24	20	23	26	26	19	27
7-9	10	11	0	9	7	15	16	2
10-15	6	6	12	0	11	7	2	9
>=15	18	18	20	18	15	15	19	21

Although males and females had the same mean expected length of service, the distributions varied, with a larger percentage of females either intending to quit in the near future or stay at least 10 years.

H. SPOUSE EMPLOYMENT STATUS (SPSEWORK)

Of those sampled who were married, three quarters had spouses employed outside of the home. All of the married females had spouses who were employed, while two-thirds of the married males had employed spouses. Department 700, which is mostly male, had the lowest number of employees with working spouses. Departments 200 and 400, with higher proportions of females, had the highest number with employed spouses.

TABLE 9
SPOUSE EMPLOYMENT STATUS DISTRIBUTION (%)

		Gender		Department				
Employment Status	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
Employed outside home	75	64	100	82	80	53	79	76
Not employed	25	36	0	18	20	47	21	24

I. PURSUIT OF ALTERNATE EMPLOYMENT (JOBSEEK)

A relatively small percentage of the sample population had actively sought employment outside of the Center within the past year. Females were more likely to seek such opportunities than were males. Department 200 was the most likely to search, with almost twice as many respondents searching for other jobs than in department 900, the least likely to look.

TABLE 10
PURSUIT OF ALTERNATIVE EMPLOYMENT DISTRIBUTION (%)

		Gender		Department				
Job Search Status	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
Searched for alternate	22	21	27	30	22	19	26	16
Did not search	78	79	73	70	78	81	74	84

J. DEPARTMENT (DEPT)

Table 11 presents the breakdown of respondents by department. A total of 4 respondents did not indicate which department they worked in. A total of 1 person did not provide data on gender or department. Gender breakdown is not provided for department 070, and no further analysis is done on this department, due to the small sample size.

TABLE 11
DEPARTMENT DISTRIBUTION (%)

	Gender		
department	overall	male	female
n	174	147	26
070	2	X	X
200	23	18	5
400	27	22	5
700	27	27	0
800	46	38	8
900	45	38	7
unk	4	2	1

IV. JOB CHARACTERISTICS

This section profiles several important job related characteristics of the sample population at the beginning of fiscal year 1990.

A. SATISFACTION WITH CURRENT JOB (SATJOB)

A majority of the respondents were satisfied with the jobs they were working in. Males tended to be more satisfied than did females. Departments 200, 700, and 800 respondents were, on average, all very satisfied with their jobs, with almost three-fourths of those surveyed in each department indicating they were satisfied. Conversely, those personnel sampled from departments 400 and 900 were less satisfied, with over one-third of their sampled populations indicating that they were dissatisfied with their current job. In all sampled groups, the mean tended towards "satisfied" with the current job.

TABLE 12
SATISFACTION WITH CURRENT JOB DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.8	4.9	4.3	5.2	4.4	5.2	4.8	4.6
satisfied	66	68	50	74	56	70	72	60
neutral	7	7	8	8	11	11	2	4
dissatisfied	27	25	42	18	33	19	26	36

B. LIKE CURRENT JOB (JOBLIKE)

At least twice as many respondents in every sample group stated that they liked their job. In departments 200 and 700, at least seven times as many people liked their jobs as disliked their jobs. Males tended to like their job more than did females, which had the lowest like job to dislike job ratio of any sample group, with twice as many liking their jobs as disliking their job.

TABLE 13
LIKE CURRENT JOB DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	5.0	5.1	4.5	5.3	4.6	5.4	4.9	4.9
agree	72	74	61	83	63	85	72	67
neutral	7	6	8	4	7	4	6	9
disagree	21	20	31	13	30	11	22	24

C. SATISFACTION WITH ASSIGNMENT STABILITY (SATSTAB)

Nearly two-thirds of the respondents in every sampled group stated that they were satisfied with the stability in their assignments. Males and females had similar feelings concerning stability; both groups were slightly satisfied. Department 700 personnel were the most satisfied with assignment stability, department 900 personnel were the least satisfied.

TABLE 14
SATISFACTION WITH STABILITY DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	172	145	26	22	27	27	46	44
mean	4.9	4.9	4.9	5.0	5.0	5.2	4.9	4.7
satisfied	64	64	61	68	63	74	61	59
neutral	22	21	27	23	30	19	24	14
dissatisfied	14	15	12	9	7	7	15	27

D. SATISFACTION WITH JOB SECURITY (SATJBSEC)

An overwhelming majority of those sampled were satisfied with their job security. Department 700 was the only sample population to have less than a 90% satisfaction rate. Department 900 was the only department to have any personnel who were actually dissatisfied with job security. There were no females dissatisfied with job security.

TABLE 15
SATISFACTION WITH JOB SECURITY DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	6.0	6.0	6.2	5.8	6.4	5.9	6.2	5.8
satisfied	89	89	92	91	96	85	91	84
neutral	10	10	8	9	4	15	9	11
dissatisfied	1	1	0	0	0	0	0	5

E. SATISFACTION WITH OPPORTUNITIES TO WORK WITH STATE OF THE ART EQUIPMENT (SATHITCH)

A majority of those sampled were satisfied with the opportunities that they had to work with state of the art high technol-

ogy equipment. Females tended to be slightly more satisfied than males, on average. Department 200 and 400 personnel were very satisfied with their opportunities, with nearly four times as many personnel indicating satisfaction as indicating dissatisfaction. Department 900 personnel were the least satisfied.

TABLE 16
SATISFACTION WITH TECHNOLOGY DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.7	4.6	5.0	5.0	5.0	4.7	4.6	4.3
satisfied	61	59	50	70	74	59	56	53
neutral	15	15	19	9	11	11	17	20
dissatisfied	24	26	31	21	15	30	27	27

F. SATISFACTION WITH CAREER PATH OPPORTUNITIES (SATCRPTH)

Less than one-third of those sampled indicated that they were satisfied with career path opportunities at the Center (see section VII for further clarification). Males tended to be more satisfied than did their female counterparts. Department 200 personnel were most satisfied with the career path opportunities available, departments 700 and 900 personnel were the least satisfied. In general, the means tended towards dissatisfaction.

TABLE 17
SATISFACTION WITH CAREER PATH DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	173	146	26	23	27	27	45	45
mean	3.5	3.5	3.7	4.0	3.8	3.3	3.4	3.3
satisfied	29	31	23	39	37	26	27	22
neutral	17	15	27	26	18	11	13	20
dissatisfied	54	54	50	35	45	63	60	58

G. SATISFACTION WITH OPPORTUNITIES TO ACCOMPLISH SOMETHING WORTHWHILE (SATACCMP)

Most respondents felt that the tasks and jobs they were doing were accomplishing something worthwhile. Males tended to feel this more than did females. Departments 200 and 700 were most satisfied with their opportunities to accomplish worthwhile tasks, department 900 personnel were least satisfied with their opportunities. In all cases, except females and department 900, twice as many respondents were satisfied as were dissatisfied.

TABLE 18
SATISFACTION WITH OPPORTUNITY TO ACCOMPLISH DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	172	145	26	23	27	27	44	45
mean	4.5	4.6	4.4	4.9	4.6	4.9	4.4	4.2
satisfied	59	61	50	70	59	70	57	47
neutral	11	10	12	9	11	11	9	13
dissatisfied	30	29	38	21	30	19	34	40

H. SATISFACTION WITH OPPORTUNITIES FOR PROFESSIONAL GROWTH (SATGRWTH)

Roughly two-thirds of the sample population was satisfied with the opportunities available to experience professional learning and growth. Males were only slightly more satisfied than females. Satisfaction with growth opportunities was consistent across departmental bounds. In all cases, the mean tended towards satisfaction. Less than one-third of those samples in any sample population were dissatisfied with the available growth opportunities.

TABLE 19
SATISFACTION WITH GROWTH DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.7	4.7	4.7	4.8	4.6	4.8	4.6	4.6
satisfied	62	63	58	64	59	63	65	58
neutral	8	8	8	4	15	4	6	9
dissatisfied	30	29	34	30	26	33	29	33

I. ORGANIZATION IMPORTANT (ORGIMPRT)

A large majority of those sampled indicated that what happened to the Center was really important to them. At least three-fourths of the sample populations of each group indicated this to be true. Department 400 had the largest percentage of those who disagreed.

TABLE 20
ORGANIZATION IMPORTANT DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	5.5	5.5	5.6	5.7	5.3	5.3	5.5	5.7
agree	83	82	85	87	74	74	83	87
neutral	9	9	11	9	11	18	8	6
disagree	8	9	4	4	15	8	9	7

J. FEEL PERSONALLY RESPONSIBLE FOR WORK (WKRESP)

An overwhelming majority of the respondents, independent of sample group, indicated that they felt responsible for the work they did. Department 700 had the lowest agreement rate, yet had an eight-to-one agree-disagree ratio. The entire sample population in department 200 felt responsibility for their own work. Females felt more responsibility than did their male colleagues.

TABLE 21
FEEL RESPONSIBLE FOR WORK DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	6.0	5.9	6.2	6.3	5.8	5.7	6.1	6.0
agree	93	92	96	100	89	85	96	91
neutral	2	2	4	0	7	4	2	0
disagree	5	6	0	0	4	11	2	9

K. SATISFACTION WITH FREEDOM ON THE JOB (SATFREE)

At least three-fourths of those sampled in every sample population felt satisfied with the amount of on the job freedom

allowed to them. Males and females had identical distributions. Department 200 personnel were the most satisfied, with no one who was sampled indicating dissatisfaction with job freedom; department 700 had the fewest number of satisfied employees, and department 900 had the largest percentage of dissatisfied employees. In all cases, the mean was between "slightly satisfied" and "satisfied".

TABLE 22
SATISFACTION WITH FREEDOM ON THE JOB DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	5.7	5.6	5.8	6.0	5.8	5.6	5.5	5.6
satisfied	74	75	75	96	89	74	83	85
neutral	9	8	8	4	7	15	13	2
dissatisfied	7	7	7	0	4	11	4	13

L. SATISFACTION WITH PARTICIPATION IN DECISION PROCESS (SATDECPT)

A majority of those polled indicated that they were satisfied with their opportunities to be a part of the decision process. The percentage of satisfied personnel was two to six times more than the percentage of dissatisfied personnel, except in departments 700 and 900, and females. In all cases, the mean tended towards slight satisfaction (see section V "work groups" for further discussion on decision involvement).

TABLE 23
SATISFACTION WITH DECISION PROCESS DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.6	4.6	4.3	4.8	5.1	4.4	4.6	4.3
satisfied	56	58	50	61	71	56	57	49
neutral	16	16	15	22	18	7	15	16
dissatisfied	28	26	35	17	11	37	28	35

M. SATISFACTION WITH TRAINING OPPORTUNITIES (SATTRAOP)

Nearly two-thirds of those sampled were satisfied with the opportunities available to receive training. Department 800 personnel were the least satisfied.

TABLE 24
SATISFACTION WITH TRAINING OPPORTUNITIES DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.7	4.7	4.7	4.8	4.7	4.9	4.3	4.9
satisfied	66	64	65	70	63	67	54	71
neutral	6	8	0	4	7	11	5	7
dissatisfied	28	26	35	26	30	22	41	22

N. SATISFACTION WITH CO-WORKERS (SATCOWK)

A large majority of the sample population was satisfied with their co-workers and work groups (see section V for further explanation). Department 400 had the lowest percentage of satisfied personnel, department 800 had the highest percentage of dissatisfied personnel. Department 200 personnel were the most

satisfied with their co-workers, with no one indicating that they were dissatisfied.

TABLE 25
SATISFACTION WITH COWORKERS DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	5.5	5.5	5.5	5.7	5.3	5.6	5.5	5.5
satisfied	78	78	77	91	67	81	83	76
neutral	13	13	15	9	22	11	4	15
dissatisfied	9	9	8	0	11	8	13	9

SUMMARY OF GENERAL JOB RELATED ASPECTS (TABLES 12 THROUGH 25)

In general, the survey population liked their jobs and were satisfied with them as well. In addition, most personnel were satisfied with their assignment stability, the opportunity to work with high technology, freedom on the job, opportunity to accomplish something worthwhile, and opportunities for growth. Co-workers and training opportunities were also sources of satisfaction; the opportunity to participate in the decision process was only somewhat of a satisfier. Employees sampled overwhelmingly felt personal responsibility for their work, and that the organization was important to them. The only downbeat aspect was that career path opportunities were not satisfactory to a large portion of the sample.

O. SATISFACTION WITH PAY (SATPAY)

Less than one-third of those sampled were satisfied with the pay they received (see section VI for further information). Females tended to be slightly more satisfied than were their male counterparts. Personnel in department 400 were the most satisfied with pay, yet there were still more people dissatisfied than were satisfied. Department 800 personnel were the least satisfied, with a greater than 3-to-1 ratio of dissatisfied-to-satisfied employees. In all cases, the mean tended towards dissatisfaction.

TABLE 26
SATISFACTION WITH PAY DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.5	3.5	3.7	3.4	4.0	3.3	3.2	3.6
satisfied	30	29	35	30	41	33	22	29
neutral	12	13	12	9	15	15	6	18
dissatisfied	58	58	53	61	44	52	72	53

P. PAY EQUITABLE FOR WORK PERFORMED (PAYEQUIT)

Less than one-third of those sampled felt that pay was equitable for the work and tasks performed. Males tended to believe this more than did females. Personnel in department 400 most felt that pay was equitable considering their effort and skills, while personnel in department 700 were much more negative in their views on pay equity.

TABLE 27
PAY IS EQUITABLE DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.3	3.3	3.6	3.3	4.1	2.9	3.1	3.4
agree	27	26	31	17	41	15	28	31
neutral	14	14	15	30	15	15	2	13
disagree	59	60	54	53	44	70	70	56

Q. SATISFACTION WITH FRINGE BENEFITS (SATBEN)

In general, more people were satisfied with fringe benefits at the Center than were dissatisfied. Females were slightly more satisfied than were males. Departments 400 and 700 had the largest percentage of satisfied personnel; department 900 had the worst satisfied-to-dissatisfied ratio, with an equal percentage of each.

TABLE 28
SATISFACTION WITH FRINGE BENEFITS DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.2	4.2	4.4	4.1	4.7	4.4	4.3	3.9
satisfied	55	53	58	52	63	63	57	44
neutral	9	8	11	4	4	4	13	12
dissatisfied	37	39	31	44	33	33	30	44

R. SATISFACTION WITH CURRENT BONUS SYSTEM (SATBONUS)

Very few employees at NAC were satisfied with the bonus system that was in place. Dissatisfied-to-satisfied ratios ranged from a low of 3-to-1 (for department 700, the most satisfied department)

to a high of 7-to-1 (for department 200). In all cases, the mean was between "dissatisfied" and "slightly dissatisfied".

TABLE 29
SATISFACTION WITH BONUS SYSTEM DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	172	146	25	23	26	26	46	45
mean	2.8	2.9	2.5	2.8	3.1	3.1	2.7	2.7
satisfied	12	14	12	9	8	15	15	14
neutral	27	27	28	26	42	39	15	22
dissatisfied	61	59	60	65	50	46	70	64

S. WILL RECEIVE BONUS/RAISE FOR PERFORMANCE (BONUSOP)

Very few of those polled felt that they were likely to receive a bonus or pay raise for good performance in the near future. Males tended to feel that they were more likely to receive such kudos than did females. Department 700 personnel most felt that they were likely to have such opportunities, yet more than three times as many felt that they were unlikely to receive them as felt that they were likely to receive them. Department 800 personnel felt least likely to receive bonuses or raises. In all cases, the mean tended towards unlikely.

TABLE 30
BONUS/RAISE OPPORTUNITY DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	2.2	2.2	2.0	2.2	2.1	2.3	2.0	2.2
likely	15	16	11	13	18	22	9	16
neutral	16	16	12	13	15	7	19	20
unlikely	69	68	77	74	67	71	72	64

T. SATISFACTION WITH PROMOTION OPPORTUNITIES (SATPRMOP)

Approximately one-third of those polled indicated that they were satisfied with their promotion opportunities. Males were more satisfied than their female colleagues with such opportunities. Department 700 personnel felt a much higher satisfaction level than did their counterparts. In all cases, the mean tended towards dissatisfaction.

TABLE 31
SATISFACTION WITH PROMOTION OPPORTUNITIES DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.6	3.7	3.2	3.7	3.6	3.9	3.5	3.5
satisfied	30	32	23	22	30	45	28	29
neutral	17	17	15	30	15	7	17	16
dissatisfied	53	51	62	48	55	48	55	55

U. WILL BE PROMOTED (PROMOOP)

Only approximately one-fourth of those sampled felt that it was likely that they would eventually be promoted. Males and

females felt equally unlikely that they would be promoted. Department 400 personnel most felt that they would likely be promoted; it was the only group with less than a 2-to-1 ratio of personnel who felt they were unlikely be promoted to those who felt they would likely be promoted. Two-thirds of department 700 felt that it was unlikely that they would be promoted.

TABLE 32
WILL BE PROMOTED DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	2.5	2.5	2.5	2.6	2.7	2.2	2.5	2.6
likely	26	26	27	22	33	22	19	27
neutral	20	20	19	26	18	11	17	20
unlikely	54	54	54	52	49	67	64	53

SUMMARY OF COMPENSATION AND PROMOTION ASPECTS (TABLES 26 THROUGH 32)

In general, the sampled employees were not satisfied with any of the compensation or promotion aspects surveyed. Only approximately one-third of those sampled were satisfied with pay received, and less than one-third felt that pay was equitable for the skills needed and effort required on the job. One-sixth were satisfied with the current bonus system, and only one-fifth expected to receive a bonus or raise based on good performance. Satisfaction with fringe benefits was slightly better, with just more than half of those sampled indicating that they were

satisfied. Approximately one-third of the population was satisfied with their promotion opportunities; yet only one-fourth feel that it is likely that they will be promoted.

There appears to be room for improvement in many areas of compensation. Although pay scales are fairly restricted, the bonus system may provide a method of increasing satisfaction. In addition, the low percentage of people expecting to be promoted indicates that many people may feel that they have reached the end of their useful careers at NAC, and that they may need to seek other employment, in that they do not feel that performance will be rewarded. This is also seen in the attitude that bonuses and raises (i.e., rewards) are not tied to performance. This may be sending the wrong type of message to employees-- performance is not rewarded.

V. COULD FIND BETTER JOB (BETTJOB)

An overwhelming majority of every sample population, with the exception of females, felt that it was likely that they could find a better job outside of NAC. Only one-third of the females sampled, as compared with 85% of the males, felt that they could find a better job; half were unsure. In departments 700 and 800 there were no respondents who felt that it was unlikely that they could find a better job.

TABLE 33
COULD FIND BETTER JOB DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.2	4.2	4.1	4.0	4.3	4.3	4.2	4.2
likely	83	84	30	83	81	89	85	84
neutral	14	12	50	8	15	11	15	9
unlikely	3	4	19	9	4	0	0	7

W. PROBABLY LOOK FOR JOB IN NEAR FUTURE (JOBLOOK1)

Less than half of the sampled employees indicated that they intended to look for a new job outside of the Center. Females indicated that they were more likely to look for such a job than were males, more of whom said that they would not look than said that they probably would look. Department 700, on average, had the lowest probability of looking for a new job; departments 400 and 900 had the highest probability.

TABLE 34
LOOK FOR NEW JOB DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.9	3.9	4.0	4.0	4.1	3.6	3.8	4.1
will probably look	41	40	46	39	48	41	37	43
neutral	17	17	15	17	7	15	15	24
wont look	42	43	39	44	45	44	48	33

X. LOOK FOR JOB IN NEAR FUTURE (JOBLOOK2)

This question was asked as a verification for the preceding question. The answers for this question tended towards a neutral response and had a much more consistent distribution across sample groups.

TABLE 35
WILL LOOK FOR NEW JOB DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.0	3.0	3.0	3.0	3.0	2.9	3.0	3.0
likely	34	33	38	35	44	37	31	31
neutral	26	26	31	30	18	18	28	31
unlikely	40	41	31	35	38	45	41	38

Y. WILL REMAIN AT NAC AT LEAST FIVE MORE YEARS (STAYINT)

Approximately one-third of the sample population thought that it was likely that they would remain at the Center at least five more years (the mean expected years of service remaining ranged from 6.5 to 7.4 years, see section III). Males tended to feel that it was likely that they would stay more than did females, although, on average, females had a higher mean. Department 200, on average, indicated the least likelihood of remaining five more years, even with over half of the population feeling that they would likely stay such a time (no one thought it very likely). In all cases, the mean was either neutral or tended towards unlikely.

TABLE 36
STAY AT NAC FIVE YEARS DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	2.9	2.9	3.0	2.5	3.0	2.8	3.0	3.0
likely	34	36	27	52	37	26	32	42
neutral	31	29	38	26	30	41	35	24
unlikely	35	35	35	22	33	33	33	34

Z. WILL REMAIN AT NAC UNTIL RETIREMENT (RETIRE)

Less than one-fifth of those sampled employees felt that it was likely that they would remain at the Center until retirement. Males felt much more likely to retire at NAC than did females, who had a 7-to-1 ratio for unlikely to retire to likely to retire. In all cases, there was at least a two-to-one unlikely-to-likely ratio.

TABLE 37
WILL RETIRE AT NAC DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	2.5	2.5	2.3	2.3	2.6	2.6	2.3	2.6
likely	19	21	8	17	23	22	15	20
neutral	33	31	38	35	37	37	22	33
unlikely	48	48	54	48	40	41	63	47

AA. OFTEN THINK OF QUITTING (THNKQUIT)

One-third of the overall sample often thought of quitting their jobs. Females, who were the only group with a larger

percentage of those who thought of quitting than those who did not, were much more likely to think of quitting than were males. Department 700 personnel were least likely to think of quitting by a large margin over any other department.

TABLE 38
THINK OF QUITTING OFTEN DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.6	3.5	4.2	3.5	3.7	3.0	3.6	3.8
agree	33	29	54	30	41	11	37	33
neutral	16	17	8	17	11	22	13	16
disagree	51	54	38	53	48	67	50	47

AB. HARD TO LEAVE JOB (JOBLEAVE)

Roughly one-third of the employees sampled indicated that they felt that it would be difficult for them to leave NAC and their jobs even if they wanted to. Department 900 personnel particularly felt that it would be difficult to leave, while personnel in departments 400 and 800 felt it would be somewhat less difficult.

TABLE 39
HARD TO LEAVE JOB DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.6	3.6	3.5	3.7	3.3	3.9	3.2	3.9
agree	32	33	35	26	30	37	26	44
neutral	20	20	19	30	15	22	20	16
disagree	48	47	46	44	55	41	54	40

SUMMARY OF TENURE RELATED QUESTIONS (TABLES 33 THROUGH 39)

In general, even though an overwhelming majority of the surveyed population felt that they could find better jobs elsewhere, less than half were inclined to look for such opportunities in the near future. Roughly one-third of the sample population felt that they would find it difficult to leave NAC, for whatever reason, and only a similar percentage indicated that they even thought of quitting very often. People appear to feel some tie(s) to NAC that make it hard for them to leave, or even search for, the better jobs that they feel are waiting outside of NAC. Females tend to feel less attachment to the Center than do males; they intend to look for jobs more, fewer intend to remain at the Center for another five years, and even fewer intend to remain until retirement.

AC. POOR COMMUNICATIONS WITHIN NAC (COMMS)

An overwhelming percentage of the sample population agreed that there was poor communications within the Center.

TABLE 40
COMMUNICATIONS POOR DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	6.0	6.0	6.0	6.0	5.7	6.6	5.9	6.1
agree	91	91	92	87	85	96	91	96
neutral	5	6	0	4	7	4	7	2
disagree	4	3	8	9	8	0	2	2

AD. WILL RECEIVE FEEDBACK FROM SUPERVISOR (FEEDBACK)

A majority of those sampled felt that they would be likely to receive supervisor feedback concerning their performance. Males tended to feel this more than did females. Personnel in department 400 felt more likely to receive feedback than did their colleagues; while personnel in department 900 felt much less likely to receive such feedback.

TABLE 41
WILL RECEIVE FEEDBACK DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	173	147	25	22	27	27	46	45
mean	3.6	3.7	3.5	3.8	3.9	3.8	3.6	3.3
likely	62	64	56	64	70	67	63	51
neutral	18	16	28	18	19	18	20	16
unlikely	20	20	16	18	11	15	17	33

AE. MANAGEMENT MAKES JOB EASIER (MGMT)

Approximately two-thirds of the sample population felt that management did not make doing their jobs easier. Department 400 most felt that management did make the job easier, with a roughly equal distribution of responses. In all other cases, at least three times as many respondents felt that management did not make the job easier as felt that management did make the job easier. Department 700 had the most negative view of management. Females had a less positive view of management than did males (see section

VII, Career Development, for more comments on management as a career anchor and as a career path).

TABLE 42
MANAGEMENT MAKES JOB EASIER DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.1	3.1	2.8	2.9	3.8	2.6	3.1	2.9
agree	22	23	16	21	30	18	22	20
neutral	15	16	8	9	37	4	11	13
disagree	63	61	76	70	33	78	67	67

AF. ENOUGH VARIETY ON THE JOB (JOBVAR)

Most of the sampled population are satisfied with the amount of variety experienced on the job. Personnel in department 400 were much less satisfied with job variety than were their counterparts. In all cases, the mean tended towards satisfaction with job variety.

TABLE 43
ENOUGH VARIETY ON THE JOB DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	5.0	5.0	4.7	5.2	4.2	5.4	4.9	5.2
agree	71	71	69	83	52	78	67	75
neutral	9	10	0	4	4	15	11	7
disagree	20	19	31	13	44	7	22	18

AG. ENOUGH CHALLENGE ON THE JOB (JOBCHLNG)

In all cases, a majority of the respondents were happy with the amount of challenge experienced on the job. Males tended to find more challenge than did females. Department 400 personnel agreed least that their jobs provided enough challenges by a large margin when compared with the other departments. Department 700 most felt that their jobs provided enough challenges by a wide margin over the other departments.

TABLE 44
ENOUGH CHALLENGE ON THE JOB DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	5.0	5.0	4.4	5.0	4.3	5.7	5.1	4.8
agree	74	76	61	74	52	93	78	69
neutral	7	7	4	13	11	0	9	4
disagree	19	17	35	13	37	7	13	27

AH. TOO MUCH STRESS ON THE JOB (JOBSTRSS)

Less than one-third of the respondents felt that there was too much stress associated with their jobs. Males tended to view their jobs as more stressful than did females. Department 700 personnel found their jobs much more stressful than did any other department.

TABLE 45
TOO MUCH STRESS ON THE JOB DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	173	146	26	23	27	27	46	44
mean	3.7	3.8	3.5	3.4	3.4	4.1	3.9	3.7
agree	29	30	23	22	18	52	28	25
neutral	26	26	27	26	26	4	37	29
disagree	45	44	50	52	56	44	35	46

AI. FAMILY WOULD BE BETTER OFF IF LEFT NAC (BETTOFF)

Approximately one-third of those polled felt that their families would be better off if they left NAC. Males tended to believe this much more than did females. Department 900 had the largest percentage of personnel who believed this was true. Less than one-fifth of the respondents in any group believed that it was unlikely that their families would be better off. (see Table 65, section VI for comparison analysis)

TABLE 46
FAMILY WOULD BE BETTER OFF DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.2	3.2	3.3	3.3	3.2	3.3	3.1	3.4
likely	33	36	20	35	26	37	26	47
neutral	48	44	65	48	52	48	52	37
unlikely	19	20	15	17	22	15	22	16

SUMMARY OF TABLES 40 TO 46

Almost everyone sampled felt that communications within the Center were poor. In addition, while most felt that they would receive supervisor feedback, they also felt that management did not make their jobs any easier to accomplish. Most were satisfied with the level of challenge and amount of variety experienced on the job; few felt that their jobs were overly stressful. Males tended to feel the above listed feelings more than did females, although males did feel that they were subject to stress more than females did.

There appears to be a lack of respect for, and belief in, management as a whole. A large part of the problem may be due to the perceived communications difficulties. Challenges and job variety could be, and should be, used as selling points to prospective recruits. Stress does not appear to be much of a problem, except for department 700.

V. WORK GROUPS

This section profiles several important work group characteristics of the sample population at the beginning of fiscal year 1990. The data is analyzed at the department and division levels.

A. DEPARTMENT

1. FEEL LIKE PART OF WORK GROUP (DPWKGP)

In general, most people seemed to feel that they were a part of their respective departmental work groups. Males tended to feel like they belonged more than did females. Results were consistent across all departments.

TABLE 47
PART OF WORK GROUP DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.6	4.6	4.1	4.4	4.6	4.6	4.5	4.5
agree	60	63	38	61	63	59	63	56
neutral	13	12	23	4	11	19	9	18
disagree	27	25	39	35	26	22	28	26

2. NEW IDEAS "CLOBBERED" (DPIDEAS)

A majority of the respondents felt that new ideas were not immediately shot down. Department 700 personnel felt the least able to present new ideas, with an equal number of respondents feeling that new ideas were accepted and that new ideas were "clobbered". More than twice as many respondents in department 700

as in any other department felt that new ideas were not readily accepted. Males and females had similar feelings concerning the acceptance of new ideas.

TABLE 48
NEW IDEAS "CLOBBERED" DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.2	3.3	3.0	2.9	3.1	3.8	3.2	3.3
agree	19	20	11	17	11	41	11	20
neutral	25	24	31	13	30	15	33	27
disagree	56	56	58	70	59	44	56	53

3. GROUP GOALS CLEAR (DPGOALS)

A majority of the respondents did not feel that their departmental work group goals were clear. A much larger proportion of females felt this way than did males; only one-tenth of females and one-fifth of males felt that goals were clear. Departments 200 and 800 most felt that their departmental work group goals were clear; department 700 most felt that they lacked clear goals.

TABLE 49
CLEAR GOALS DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	74	147	26	23	27	27	46	45
mean	3.4	3.3	2.7	3.5	3.1	2.9	3.5	3.1
agree	21	22	11	26	15	11	29	18
neutral	17	20	4	30	18	15	17	11
disagree	62	58	85	44	67	74	54	71

4. INVOLVED IN DECISION MAKING (DPDECIS)

A majority of the respondents did not feel that they were involved in the decisions made that affected their work place and job. Females tended to support this view more than males. Departments 200 and 700 felt the least like they were involved in the decision process; departments 400 and 900 felt the most involved. In all cases, less than one-third of the respondents felt like they had a role in the decision making process.

TABLE 50
INVOLVED IN DECISION MAKING DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.0	3.0	2.5	2.7	3.2	2.6	3.0	3.0
agree	20	22	12	9	22	11	24	29
neutral	8	9	4	9	15	7	9	2
disagree	72	69	84	82	63	82	67	69

5. AFRAID TO EXPRESS VIEWS (DPVIEWS)

Approximately one-third of the respondents agreed with the statement that some of their co-workers were afraid to express their views. Females tended to believe this more than did males. Departments 400 and 900 especially believed this to be true, while departments 200 and 800 tended to disagree, feeling that their co-workers were not afraid to express views.

TABLE 51
AFRAID TO EXPRESS VIEWS DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.6	3.7	3.9	3.3	4.2	4.0	3.3	4.0
agree	34	33	38	17	44	33	24	47
neutral	19	19	27	26	26	26	15	16
disagree	47	48	35	57	30	41	61	37

6. SOME COWORKERS LACK RESPECT (DPRESPCT)

Less than half of those sampled felt that some of their co-workers lacked respect for others. Females tended to feel that their coworkers were less respectful of others than did males. Department 400 appeared to have the most trouble with disrespectful employees, with over half of those sampled feeling that some coworkers were disrespectful to others. Departments 700 and 800 had the least problems with disrespect between co-workers.

TABLE 52
LACK RESPECT DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.0	4.0	4.5	4.0	4.3	4.0	3.8	4.2
agree	40	39	50	43	52	33	33	43
neutral	23	24	15	26	15	30	19	24
disagree	37	37	35	31	33	37	48	33

7. OPINIONS LISTENED TO (DPOPIN)

Approximately half of the respondents felt that everyone's opinions were listened to within the departmental work group. Almost twice as many males felt this was true as did females. Department 700 least felt that opinions were listened to, departments 200 and 400 most felt that opinions were listened to.

TABLE 53
OPINIONS LISTENED TO DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.2	4.3	3.5	4.2	4.4	3.7	4.2	4.2
agree	46	48	27	52	48	30	48	44
neutral	19	21	11	22	26	22	13	20
disagree	36	31	62	26	26	48	39	36

8. MORALE IS HIGH (DPMORALE)

A majority of the respondents felt that morale in their departmental work group was low. No females thought that morale was high. Department 700 appeared to have the biggest problems with morale, while departments 200 and 400 had the highest morale.

TABLE 54
MORALE IS HIGH DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.3	3.3	2.5	3.2	3.3	2.8	3.1	3.1
agree	17	20	0	22	22	18	15	13
neutral	24	25	23	26	33	4	24	27
disagree	59	55	77	52	45	78	61	60

DEPARTMENTAL WORK GROUP SUMMARY

Most respondents felt negatively towards the way that their departments' work groups were currently functioning. Although all departments were consistent in making their members feel like part of their respective groups, some departments appear to be having more difficulties than others on the subjects addressed by this survey. Work groups in department 700 appear to be having the most difficulty, with the worst scores for "new ideas getting clobbered", "clear goals", "involvement in the decision process", "opinions are listened to", and "morale" questions. By this same measure, work groups within departments 200 and 400 appear to be having the least difficulties, with high scores in all areas except for "participation in decisions" (200) and "clear goals" (400). Work groups in department 800 appear to be having problems with many are afraid to express their views, and many feel that their co-workers lack respect for others. Department 900 work groups scored poorly on "clobbered new ideas", "opinions listened to", and "morale"; but scored really well on "decision involvement" and "co-worker respect".

B. DIVISION

1. **FEEL LIKE PART OF WORK GROUP (DVWKGP)**

In general, people felt that they belonged to their respective divisional work groups. Personnel in department 200 tended

to feel this more than did the other departments, while department 800 felt it less.

TABLE 55
PART OF WORK GROUP DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.5	4.6	4.6	4.8	4.6	4.7	4.5	4.6
agree	61	61	58	69	63	63	57	60
neutral	12	11	19	9	11	4	17	9
disagree	27	28	23	22	26	33	26	31

2. NEW IDEAS "CLOBBERED" (DVIDEAS)

In general, most respondents felt that new ideas were fairly well accepted, and not "clobbered". Males tended to feel that new ideas were clobbered more than did females. Department 700 personnel most believed that new ideas presented within their divisions were "clobbered" by a large margin over any other department; department 200 personnel most believed that new ideas were not "clobbered" by a large margin over the other departments. The overall means in every sample tended towards "disagreeing" that new ideas were clobbered.

TABLE 56
NEW IDEAS "CLOBBERED" DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.3	3.3	2.8	2.8	3.1	3.6	3.2	3.2
agree	14	16	4	4	11	30	13	16
neutral	29	28	35	22	30	26	30	31
disagree	57	56	61	74	59	44	57	53

3. GROUP GOALS CLEAR (DVGOALS)

Less than one third of those sampled believed that their divisional goals were clear. Males tended to believe goals were clear by a large margin as compared with females, who believed by a 10-to-1 margin that goals were not clear. Department 200 personnel believed that their divisional goals were clear much more than did any other group; with equal numbers of respondents indicating that goals were clear and goals were unclear. In all other cases, there existed at least a 2.5-to-1 ratio of those who felt that goals were not clear to those who felt that they were clear. Department 400 personnel most felt that goals were unclear.

TABLE 57
GOALS CLEAR DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.3	3.5	2.9	4.0	3.3	3.3	3.3	3.4
agree	25	27	8	35	15	22	24	24
neutral	19	21	11	30	22	19	13	20
disagree	56	52	81	35	63	59	63	56

4. INVOLVED IN DECISION MAKING (DVDECIS)

Overall, few of the respondents felt that they were actively involved in the decision making process within their respective divisions. Males, who had greater than a 2-to-1 ratio for those who felt not involved to those who felt involved, tended to feel more a part of the decision process than did females, who had a 20-to-1 ratio for not involved-involved. Department 900 personnel most felt involved in their divisional decisions, department 800 personnel least involved.

TABLE 58
INVOLVED IN DECISION MAKING DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	2.9	3.1	2.5	3.1	3.1	2.8	2.7	3.4
agree	20	23	4	13	19	15	15	33
neutral	16	16	16	26	23	15	11	13
disagree	64	61	80	61	58	70	74	54

5. AFRAID TO EXPRESS VIEWS (DVVIEWS)

Less than one-third of those sampled felt that co-workers were afraid to express their views. Males and females had similiar views. Department 400 and 900 most felt that their co-workers were afraid to express their views within their respective divisions, while department 200 personnel most disagreed that there was fear. Department 400 was the only department in which more people felt that there was fear then felt that there was no fear. In all other

cases (with the exception of department 900, where a bare majority existed), at least twice as many respondents felt that there was no fear to express views within the division than felt that fear was present. For department 200, seven times as many felt that way.

TABLE 59
AFRAID TO EXPRESS VIEWS DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.8	3.6	3.7	2.8	4.0	3.7	3.5	3.9
agree	29	29	31	9	41	22	24	40
neutral	20	20	19	22	22	30	22	13
disagree	51	51	50	69	37	48	54	47

6. SOME COWORKERS LACK RESPECT (DVRESPCT)

In general, those sampled tended to agree that some of their co-workers lacked respect for others within the division. Females tended to believe this more than males. Departments 400 and 700 believed that their divisional co-workers lacked respect more than did members of other departments. Department 800 personnel tended to disagree that their co-workers lacked respect more than other departments did.

TABLE 60
LACK RESPECT DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.1	3.9	4.3	3.8	4.2	4.3	3.9	3.9
agree	40	39	46	43	48	44	37	34
neutral	20	20	19	22	15	26	15	24
disagree	40	41	35	35	37	30	48	42

7. OPINIONS LISTENED TO (DVOPIN)

In general, most respondents felt that their opinions were listened to within their respective divisional work groups. Males tended to believe this more than did females, the only group in which over half of the sample population believed that their opinions were not listened to and in which the mean tended towards "disagree". Department 400 personnel felt that their opinions were heeded within their respective divisions by a much larger percentage than in any other department. Departments 700 and 800 least believed that their opinions were listened to within their divisions.

TABLE 61
OPINIONS LISTENED TO DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.2	4.3	3.8	4.2	4.6	4.0	4.0	4.3
agree	48	49	38	43	63	44	39	49
neutral	19	21	8	26	11	19	24	16
disagree	33	30	54	31	26	37	37	35

8. MORALE IS HIGH (DVMORALE)

As with the department sample, most respondents did not feel that morale was high within their divisions. Males tended to believe that morale was higher than did females, yet less than one-fourth of the males sampled classified morale within their divisions as "high". Ten times as many females felt that morale was low as felt that it was high. In every department sample there was at least twice as many who felt that morale was not high as those who felt that it was high. Department 800 personnel felt that their divisional morale was higher than did the other departments.

TABLE 62
MORALE IS HIGH DISTRIBUTION (%)

		Gender		Department				
response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.1	3.4	2.7	3.1	3.3	3.1	3.5	3.3
agree	21	24	8	13	22	22	24	20
neutral	26	28	15	35	30	15	24	29
disagree	53	48	79	52	48	63	52	51

DIVISIONAL WORK GROUP SUMMARY

Most respondents felt negatively towards the way that their divisions were functioning. Although all divisions were consistent in making their members feel like part of the group, some departments appear to have divisions that were having more difficulties

than others on the subjects addressed by this survey. Department 700's divisions appear to experience the most difficulty, with the worst scores for the "new ideas getting clobbered" and "co-workers lack respect" areas, and poor scores for the "involvement in the decision process", "opinions are listened to", "clear goals", and "morale" questions. By this same measure, divisions within departments 200 and 900 appear to be having the least difficulties, with high scores in all areas except for "morale" (200) and "afraid to express views" (900). Divisions within department 800 appear to have problems with their involvement in making decisions and in having their opinions listened to. Divisions within department 700 scored poorly on "clobbered new ideas", "opinions listened to", "co-workers lack respect", "involvement in decisions", and "morale". Divisions within department 400 expressed problems with "clarity of divisional goals", "fear in expressing views", and "co-worker lack of respect"; but scored really well on "involvement in decisions", "morale", and "opinions listened to".

Comparison of the results for department work groups and divisional work groups by department provide some interesting results. The respondents tended to feel more a part of their division than they did for their departments by only a very slight margin-- means and distributions were similiar for all groups. Females were the only group which had a significantly larger percentage feeling that they were more a part of their division;

no group felt more a part of their departments. It is somewhat surprising that more people did not feel a part of the smaller, more intimate group-- the division-- than felt they were a part of the larger, more impersonal group.

Most sample populations felt that their divisional goals were clearer than their departmental goals. Only the respondents in department 800 felt that divisional goals were less clear than department goals.

There were differences between department and division level views concerning fear in expressing views, lack of co-worker respect, opinions being listened to, and morale. For fear in expressing views, department 800 was the only group which felt that there was more fear at the division level than at the department level. Departments 700 and 800 felt that co-workers at the divisional level had more problems with lack of respect than did co-workers at the department level. Department 800 was the only department which felt that opinions were listened to at the departmental level more than they were at the divisional level. All sample groups except for department 200 felt that morale was higher at the division level than at the department level. Department 800 was the only department that felt that there was more involvement in the decision process at the department level than at the division level. All of the sample populations felt that new ideas were clobbered at the department level more than

they were at the division level.

VI. GENERAL

This section profiles several important general characteristics of working at Naval Avionics.

A. CENTER WIDE MORALE (NACMORALE)

Table 63 provides the response distribution for whether morale is high at NAC or not. The mean response for the entire sample was "slightly disagree". Males tended to think that morale was higher than did females. Morale was the highest in departments 400 and 900; the lowest in department 200. In all sample groups, less than one-third of the respondents thought morale was high, while at least twice as many felt morale was low.

TABLE 63
MORALE DISTRIBUTION (%)

		Gender		Department				
morale high	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.2	3.3	2.6	2.8	3.4	3.3	3.1	3.4
agree	20	23	8	30	22	22	20	22
neutral	21	20	23	22	26	11	20	22
disagree	59	57	69	48	52	67	60	56

B. SATISFACTION WITH WORKING ENVIRONMENT/CONDITIONS (WORKENV)

Table 64 presents the satisfaction distribution with working conditions and the work environment at the Center. The overall sample mean points to general dissatisfaction with work conditions at the Center. Males tended to be more satisfied with conditions

than females. Department 400 employees were much more satisfied than their counterparts, with over half of the respondents satisfied; while department 700 employees were much less satisfied, with twice as many dissatisfied employees as satisfied employees.

TABLE 64
WORK CONDITIONS DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.7	3.8	3.4	3.4	4.4	3.0	3.6	3.9
satisfactory	43	47	23	35	52	30	39	52
neutral	8	5	23	4	15	4	11	4
unsatisfactory	49	4°	54	61	33	66	50	44

C. SATISFACTION WITH LIFE AT NAVAL AVIONICS (SATNAC)

Global feelings concerning satisfaction with the overall life associated with working at Naval Avionics is presented in Table 65. In the overall sample, there were as many satisfied as dissatisfied employees. Males tended to be more satisfied than females. Department 200, with roughly the same mean as the other groups, had much fewer satisfied personnel than the other departments.

TABLE 65
LIFE AT NAC DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.0	4.1	3.5	4.1	4.0	4.0	4.0	3.9
satisfied	42	46	23	29	44	44	41	42
neutral	14	14	15	22	11	15	17	9
dissatisfied	44	40	62	49	45	41	42	49

D. COULD BE BETTER OFF IF LEFT NAC (BETTOFF2)

Table 66 shows that many people were unsure whether or not they and their families could be better off if they left NAC. In all cases, except females, the means tended towards agreement that they could be better off leaving NAC. Of those respondents who were not neutral (i.e., had an opinion), in general most thought that they could be better off employed elsewhere. In the overall sample, male sample, and departments 700 and 900 samples, more than twice as many thought they could be better off leaving than did those who thought they could be better off staying. Equal numbers of females thought they could be better off leaving as staying. Department 200 was the only group in which a majority thought that they could be better off by staying. Five times as many people in department 200 than in department 700, and at least twice as many as other departments, thought that they could be better off staying at the Center.

TABLE 66
COULD BE BETTER OFF DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.4	4.4	3.9	4.5	4.2	4.5	4.2	4.5
agree	39	41	27	26	30	41	30	49
neutral	40	39	46	22	44	48	52	24
disagree	21	20	27	52	26	11	18	27

E. NAVAL AVIONICS AS EXPECTED (NACXPECT)

Less than half of the sampled personnel thought that working at the Center was as they had initially thought it would be. Males tended to think that NAC was as they expected more than females did. Department 700 employees found that working at NAC was most like they had thought it would be, department 400 the least.

TABLE 67
NAC AS EXPECTED DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.9	4.0	3.7	3.9	3.6	4.3	3.9	4.0
as expected	41	42	31	39	33	52	41	40
neutral	16	16	19	17	22	18	13	11
not as expected	43	42	50	44	45	30	46	49

F. REWARDS BASED ON PERFORMANCE (REWARDS)

A majority of the respondents in all sample groups felt that pay raises and promotions were not based on performance. Three times as many respondents in the overall sample felt that this was the case than felt that rewards were based on performance. Males tended to think that rewards were based on performance more than did females, only one-tenth of whom felt this way. Department 700 and 800 personnel most felt that rewards were based on performance, department 900 least felt that they were connected. In all cases, the mean response was "slightly disagree" or less.

TABLE 68
REWARDS DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.0	3.1	2.5	2.8	2.9	3.3	3.1	2.8
agree	24	26	11	22	19	30	31	18
neutral	7	7	4	0	7	7	4	11
disagree	69	67	85	78	74	63	65	71

G. PAY VERSUS NEEDS (PAYNEEDS)

A small majority of the sample population indicated that current pay received at least met their present needs. Pay was able to meet the needs of females more than for males. Department 800 least had their pay needs met, department 400 most had their pay needs met. As expected, relatively few people said that the pay received exceeded their needs, although one-third of those polled in department 400 indicated that this was the case. Department 400 also had the lowest percentage of respondents who said that pay was inadequate.

TABLE 69
PAY VS. NEEDS DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.5	3.4	3.8	3.8	4.1	3.2	3.3	3.4
pay exceeds needs	19	18	23	17	33	22	15	16
pay meets needs	34	33	42	48	41	22	24	38
pay inadequate	47	49	35	35	26	56	61	46

H. PAY IMPORTANCE (PAYIMPRT)

A large majority of respondents indicated that pay was important to them. Less than 7% of any group stated that pay was an unimportant aspect of the job for them. Pay was most important to those in departments 700, 900, and 400. It was very much less important to those in department 200, where only half of the sample indicated that pay was important, and nearly all of the rest indicated it was only moderately important.

TABLE 70
PAY IMPORTANCE DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	5.2	5.2	5.2	4.7	5.4	5.6	5.2	5.2
important	73	74	69	52	78	81	72	80
moderate	21	19	31	44	22	15	22	13
unimportant	6	7	0	4	0	4	6	7

I. JOB OFFERS (JOBOFFER)

Roughly one-third of the total sample had received a job offer from outside of the Center in the past year. Males were more likely to receive such employment offers than females by an almost two-to-one margin. Departments 700 and 800 received the most job offers, departments 200 and 900 the least offers.

TABLE 71
JOB OFFER DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
received offer	33	35	19	22	37	44	41	20
did not receive	67	65	81	78	63	56	59	80

SUMMARY

In general, employees at Naval Avionics appear to be slightly dissatisfied with the status quo. Few found working at NAC to be as they had expected it to be, and as a result, less than half of the sample were satisfied with the global measure of "life at NAC". In addition, the respondents were dissatisfied with many of the facets of job satisfaction, including the working conditions and environment, and pay, which was deemed to be an important factor by most of those sampled, yet few thought that pay was adequate to meet their needs, and few were satisfied with the current pay raise/promotion programs. Many were unsure if they could be better off by leaving NAC; but of those with an opinion, most felt that they could indeed be better off. Less than one-third had actually received another job offer, but this is just a measure of those that had received an offer and that still worked at NAC. Each of these problems likely contributes to the low morale rankings.

VII. CAREER DEVELOPMENT

This section profiles several important characteristics concerning career paths and career development at Naval Avionics.

A. SATISFACTION WITH CAREER OPTIONS AVAILABLE (CAROPT)

In general, people were dissatisfied with the career path options they felt were available to them. Over half of the respondents in most groups were dissatisfied, with those in department 200 the most dissatisfied. Females were as satisfied/dissatisfied as their male colleagues. Department 200 was the most satisfied group, with slightly more people dissatisfied than were satisfied.

TABLE 72
SATISFACTION WITH CAREER OPTIONS DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.6	3.6	3.6	3.9	3.3	3.6	3.6	3.5
satisfied w/options	32	33	31	39	18	37	35	31
neutral	16	17	11	17	19	11	17	13
dissatisfied	52	50	58	44	63	52	48	56

B. CAREER OPTIONS SATISFY CAREER GOALS (OPTGLMT)

The career options that the sample population deems to be available to them do not appear adequate to meet the needs of the Center's employees. The "not adequate" response occurred at least 3 to 5 times more than the "adequate" response for every group, with the exception of department 700, which had mostly unsure

respondents. Of those respondents in department 700 that were sure, more said that the available options were adequate than said that they were not adequate.

TABLE 73
OPTIONS SATISFY GOALS DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.2	3.1	3.4	3.1	3.0	3.1	3.2	3.2
options adequate	15	14	16	13	11	30	11	20
neutral	20	20	24	26	15	48	31	13
not adequate	65	66	60	61	74	22	58	67

C. SATISFACTION WITH CAREER DEVELOPMENT PROGRAM (CARDEV)

Less than one-third of the respondents were satisfied with the current career development program. Over half were dissatisfied. Males and females were equally dissatisfied with the program. Department 200 was the most satisfied with current career development efforts, while in every other department at least twice as many were dissatisfied as were satisfied. Department 400 was the least satisfied department.

TABLE 74
SATISFACTION WITH CAREER DEVELOPMENT PROGRAM DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.5	3.5	3.7	4.0	3.0	3.5	3.3	3.5
satisfied	25	25	27	35	26	23	26	22
neutral	24	23	23	26	22	33	9	27
dissatisfied	51	52	50	39	52	44	65	51

D. SATISFACTION WITH AVAILABILITY OF CAREER INFORMATION (CARINFO)

Most respondents felt that there was an inadequate amount of career information available to them. Females felt that there was enough information available more than did males. Department 200 was much more satisfied than any other group about the availability of information, while department 400 was much less satisfied than any other department with the availability of information. In all cases, there were at least three times as many dissatisfied responses as there were satisfied responses (except for department 200, where there were roughly twice as many).

TABLE 75
SATISFACTION WITH AVAILABILITY OF INFORMATION DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.3	3.2	3.5	3.8	3.0	3.3	3.1	3.3
satisfied	22	20	31	31	11	22	22	24
neutral	14	15	8	17	11	15	9	18
dissatisfied	64	65	61	52	78	63	69	58

E. FAMILIARITY WITH CAREER OPTIONS (FAMOPT)

Most respondents reported being unfamiliar with the career options available to them. Less than one-fourth felt that they were well informed about career choices within NAC, while over one-half felt that they were not well informed. Males tended to feel more informed than did females. Departments 800 and 900 were the most well informed groups, while department 200 was the least

informed, with less than one-tenth feeling well informed.

TABLE 76
FAMILIARITY WITH OPTIONS AVAILABLE DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.5	3.5	3.2	3.2	3.2	3.4	3.7	3.5
well informed	21	22	15	9	15	19	22	28
neutral	27	26	35	26	30	37	33	16
not informed	52	52	50	65	55	44	45	56

F. SATISFACTION WITH AVAILABILITY OF CAREER GUIDANCE (CARGUIDE)

A majority of respondents felt that the availability of career guidance was unsatisfactory. In every group (except department 200), at least four times as many people were dissatisfied with the availability of guidance than were satisfied; in department 400 nine times as many were dissatisfied. In department 200 the dissatisfied to satisfied ratio was 1.5-to-1.

TABLE 77
SATISFACTION WITH AVAILABILITY OF GUIDANCE DISTRIBUTION (%)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.1	3.1	3.2	3.7	2.8	3.1	2.9	3.1
satisfied	14	14	19	30	8	15	13	14
neutral	22	22	23	26	22	26	15	22
dissatisfied	64	64	58	44	70	59	72	64

SUMMARY

The career development program at NAC appears to suffer from a lack of information problem. Few people appear to know if such a program exists. Few were satisfied with the help or availability of information that could help them make career choices within NAC. Lack of this information could push people to careers outside of NAC.

G. CAREER ANCHORS

The career anchor concept is based on the idea that people will tend to migrate to jobs that are best able to meet one or more of the attributes that a person holds to be most important in the job process. Past research (Derr, Naval Postgraduate School; and Schein) has shown that many job attributes are important to enticing people to remain on their jobs. Some of the most important include autonomy on the job, ability to work in highly technical environments and develop technical skills, ability to use and develop management skills, opportunity to use and enhance creative ability, and job security. Tables 78 through 84 present information concerning the relative importance of each of these anchors to the sample population. Each respondent compared the importance of each anchor with the others, and ranked them in order of importance.

Table 78 shows the mean scores for each group. The technical anchor was the most important overall, with males and departments 400, 700, and 800 listing it as the most important anchor; and females and departments 200 and 700 listing it as the second most important. The security anchor was the second most important anchor overall, followed by creativity, management, and autonomy. Table 79 presents the anchors in order of importance for each group. As can be seen, females valued job security most of all, while autonomy was the least important career anchor. Males valued the technical anchor most, the autonomy anchor least. Across all groups, autonomy was rated the least important career anchor, perhaps because almost everyone is currently satisfied with the freedom and autonomy they have on the job. Management was the second least important anchor, as expressed in the overwhelming dissatisfaction with management at the Center.

TABLE 78
CAREER ANCHORS DISTRIBUTION (MEANS)

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
technical	2.4	2.3	2.8	2.7	2.2	2.5	2.3	2.2
management	3.3	3.3	3.3	3.3	3.4	3.1	3.5	3.3
creativity	2.7	2.7	2.9	2.3	2.6	3.0	2.7	2.8
autonomy	3.6	3.6	3.5	3.8	3.5	3.3	3.6	3.5
security	2.7	2.7	2.4	2.6	2.5	2.2	2.7	3.0

TABLE 79
CAREER ANCHORS ORDER OF IMPORTANCE

Overall	male	female	200	400	700	800	900
tech	tech	sec	creat	tech	sec	tech	tech
sec	sec	tech	sec	sec	tech	sec	creat
creat	creat	creat	tech	creat	creat	creat	sec
mgmt	mgmt	mgmt	mgmt	mgmt	mgmt	mgmt	mgmt
auto	auto	auto	auto	auto	auto	auto	auto

TABLE 80
CAREER ANCHORS DISTRIBUTION (%)
TECHNICAL

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	171	145	25	23	27	27	44	44
most important	30	33	16	22	37	30	30	34
very important	27	29	16	22	22	30	29	27
important	25	21	44	26	26	11	27	30
less important	12	11	20	26	11	18	11	5
least important	6	6	4	4	4	11	3	4

TABLE 81
CAREER ANCHORS DISTRIBUTION (%)
MANAGEMENT

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	171	145	25	23	27	27	44	44
most important	15	14	24	26	15	19	7	16
very important	19	20	12	9	15	19	23	25
important	13	14	8	9	7	18	16	9
less important	22	22	20	22	37	22	18	16
least important	31	30	36	34	26	22	36	34

TABLE 82
CAREER ANCHORS DISTRIBUTION (%)
CREATIVITY

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	171	145	25	23	27	27	44	44
most important	20	20	20	22	19	11	23	21
very important	26	28	20	30	26	22	25	27
important	28	28	28	44	33	37	27	16
less important	15	14	16	0	18	15	9	25
least important	11	10	16	4	4	15	16	11

TABLE 83
CAREER ANCHORS DISTRIBUTION (%)
AUTONOMY

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	171	145	25	23	27	27	44	44
most important	8	8	8	4	4	7	11	7
very important	16	14	24	22	18	26	9	14
important	18	19	16	9	15	15	14	34
less important	24	25	12	22	11	30	36	16
least important	34	34	40	43	52	22	30	29

TABLE 84
CAREER ANCHORS DISTRIBUTION (%)
SECURITY

		Gender		Department				
Response	overall	male	female	200	400	700	800	900
n	171	146	25	23	27	27	44	45
most important	27	26	32	35	26	37	30	18
very important	21	20	28	13	30	30	18	18
important	19	21	12	17	18	18	16	22
less important	22	21	24	26	19	4	23	31
least important	11	12	4	9	7	11	13	11

H. KNOWLEDGE OF AVAILABLE CAREER OPTIONS

Overall, knowledge of the career options available was low. Less than one-fifth of the sample rated themselves as even somewhat

knowledgeable about the Program Manager path; one-third felt they were at least somewhat knowledgeable about the Line Manager, Systems Engineer, and Technical Consultant paths. The overall sample felt most knowledgeable about the Systems Engineer path, followed by Technical Consultant, Line Manager, and Program Manager. Males were most knowledgeable about the Systems Engineer path, and least knowledgeable about the Program Manager path; while females were most knowledgeable about the Line Manager path, least knowledgeable about the Program Manager path-- where 96% said that they knew nothing about the option. Departments 200, 800, and 900 were most familiar with the Line Manager option, department 400 with the Technical Consultant path, and department 700 with the Systems Engineer path.

1. Program Manager (KNOPPM)

TABLE 85
KNOWLEDGE OF PROGRAM MANAGER OPTION DISTRIBUTION (%)

		Gender		Department				
knowledge	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	2.6	2.6	2.3	2.4	2.2	1.5	3.2	2.9
extremely	13	14	4	5	4	4	22	16
somewhat	5	7	0	9	0	0	11	4
not at all	82	79	96	86	96	96	67	80

2. Line Manager (KNOPLM)

TABLE 86
KNOWLEDGE OF LINE MANAGER OPTION DISTRIBUTION (%)

		Gender		Department				
knowledge	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	2.9	2.8	3.4	3.0	2.4	2.6	3.0	3.2
extremely	25	22	23	18	16	13	33	29
somewhat	9	11	0	23	4	4	7	11
not at all	66	67	77	59	80	83	60	60

3. Systems Engineer (KNOPSE)

TABLE 87
KNOWLEDGE OF SYSTEMS ENGINEER OPTION DISTRIBUTION (%)

		Gender		Department				
knowledge	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.0	3.1	2.5	3.0	2.8	2.0	3.6	3.2
extremely	18	19	8	9	20	0	30	18
somewhat	16	19	4	27	8	22	9	20
not at all	66	62	88	64	72	78	61	62

4. Technical Consultant (KNOPTC)

TABLE 88
KNOWLEDGE OF TECHNICAL CONSULTANT OPTION DISTRIBUTION (%)

		Gender		Department				
knowledge	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	2.9	3.0	2.3	2.9	3.0	2.2	3.2	2.8
extremely	19	21	8	13	18	11	31	13
somewhat	12	13	8	17	15	8	9	13
not at all	69	66	84	70	67	81	60	74

I. ATTAINABILITY OF CAREER OPTIONS

The Systems Engineer path and the Technical Consultant path were viewed as the most attainable by the sample as a whole. Males

thought that the Systems Engineer path was the most attainable for them, while the Program Manager path was least attainable; females viewed Line Manager as most attainable and Program Manager as least attainable. Department 900 did not feel that any of the options was really attainable, but most felt that Program Manager was attainable. Department 800 felt that Systems Engineer was most attainable, and that Technical Consultant was somewhat attainable. Department 700 felt that Program Manager and Systems Engineer were not very attainable, but that Technical Consultant was attainable. Department 400 felt that Technical Consultant was the most attainable career path for them, and that Line Manager and Program Manager were not viable alternatives. Department 200 felt That Line Manager was the most attainable option for them.

1. Program Manager (ATTAINPM)

TABLE 89
ATTAINABILITY OF PROGRAM MANAGER OPTION DISTRIBUTION (%)

		Gender		Department				
attainable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.0	3.0	3.0	2.9	2.6	2.1	3.4	3.3
extremely	22	21	27	18	17	14	25	28
somewhat	14	16	4	14	12	9	13	11
not at all	64	63	69	68	71	77	62	61

2. Line Manager (ATTAINLM)

TABLE 90
ATTAINABILITY OF LINE MANAGER OPTION DISTRIBUTION (%)

		Gender		Department				
attainable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.3	3.3	3.5	3.5	2.8	3.2	3.5	3.4
extremely	30	30	28	27	21	36	32	29
somewhat	17	18	16	27	12	9	16	16
not at all	53	52	56	46	67	55	52	55

3. Systems Engineer (ATTAINSE)

TABLE 91
ATTAINABILITY OF SYSTEMS ENGINEER OPTION DISTRIBUTION (%)

		Gender		Department				
attainable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.7	3.8	3.1	3.4	3.5	2.5	4.4	3.6
extremely	38	41	19	32	42	14	50	36
somewhat	18	18	19	14	12	18	22	18
not at all	44	41	62	54	46	68	28	46

4. Technical Consultant (ATTAINTC)

TABLE 92
ATTAINABILITY OF TECHNICAL CONSULTANT OPTION DISTRIBUTION (%)

		Gender		Department				
attainable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.7	3.8	3.1	3.4	4.1	3.5	4.0	3.3
extremely	33	37	16	18	54	35	34	25
somewhat	18	17	20	30	11	9	23	16
not at all	49	46	64	52	35	56	43	59

J. DESIRABILITY OF CAREER OPTIONS

In general, all of the career options available appear to be desirable to the sample population. Overall, the Technical Consultant path was the most desirable, followed by Systems Engineer, Program Manager, and Line Manager. Males and females differed considerably on what they viewed as desirable career paths. Males heavily favored Technical Consultant, followed by Systems Engineer, Program Manager, and Line Manager; while females desired Line Manager and Program Manager, followed by Systems Engineer and Technical Consultant. Program Manager was very desirable to department 900 personnel and undesirable to department 700. Department 200 and 400 favored Line Manager, department 800 strongly desired Systems Engineer, and departments 400 and 800 desired Technical Consultant the most.

Department 900 found all options to be desirable, with Line Manager being only somewhat desirable. Department 800 found Systems Engineer and Technical Consultant to be very desirable career options. Department 700 found only the Technical Consultant option to be desirable; Systems Engineer was very undesirable. Department 400 favored only Technical Consultant, department 200 found every option to be attractive.

1. Program Manager (DESIREPM)

TABLE 93
DESIRABILITY OF PROGRAM MANAGER OPTION DISTRIBUTION (%)

		Gender		Department				
desirable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.9	3.9	3.9	4.1	3.4	3.2	3.6	4.5
extremely	43	45	35	55	28	32	34	61
somewhat	15	16	11	9	28	14	22	5
not at all	42	39	54	36	44	54	44	34

2. Line Manager (DESIRELM)

TABLE 94
DESIRABILITY OF LINE MANAGER OPTION DISTRIBUTION (%)

		Gender		Department				
desirable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.6	3.5	4.1	4.0	3.7	3.6	3.1	3.7
extremely	35	35	36	32	36	36	25	45
somewhat	16	13	28	32	28	14	12	7
not at all	49	52	36	36	36	50	62	48

3. Systems Engineer (DESIRESE)

TABLE 95
DESIRABILITY OF SYSTEMS ENGINEER OPTION DISTRIBUTION (%)

		Gender		Department				
desirable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.2	4.3	3.7	4.1	3.8	2.5	4.9	4.4
extremely	48	50	42	50	40	14	63	55
somewhat	16	17	8	18	12	9	15	20
not at all	36	33	50	32	48	77	22	25

4. Technical Consultant (DESIRETC)

TABLE 96
DESIRABILITY OF TECHNICAL CONSULTANT OPTION DISTRIBUTION (%)

		Gender		Department				
desirable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.5	4.7	3.6	4.4	4.9	4.0	4.9	4.3
extremely	55	59	40	52	67	42	64	50
somewhat	16	16	12	22	18	21	14	11
not at all	29	25	48	26	15	37	22	39

K. ABILITY OF CAREER OPTIONS TO SATISFY ASPIRATIONS

Technical Consultant was the career option viewed as most able to satisfy career aspirations by the overall sample; Line Manager was viewed as the least able. Males and females differed considerably, with males stating that the Technical Consultant path had the best chance to satisfy career aspirations, followed by Systems Engineer, Program Manager, and Line Manager; and females feeling that Program Manager, followed by Line Manager, Systems Engineer, and Technical Consultant, would be best able to satisfy career aspirations. Department 900 tended to feel that Program Manager and Line Manager would satisfy aspirations best; Department 800 felt that Systems Engineer and Technical Consultant would satisfy career aspirations best. Department 700 felt that only the Technical Consultant path could satisfy their aspirations, department 400 favored technical Consultant and Program Manager, and department 200 felt that Program Manager and Systems Engineer

were best able to satisfy career aspirations.

1. Program Manager (SATASPPM)

TABLE 97
SATISFACTION OF ASPIRATIONS (PROGRAM MANAGER) DISTRIBUTION (%)

		Gender		Department				
desirable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.0	4.0	4.1	4.3	4.4	3.3	3.8	4.6
extremely	50	50	46	50	32	41	47	66
somewhat	13	15	8	23	28	5	13	7
not at all	37	35	46	27	40	54	44	27

2. Line Manager (SATASPLM)

TABLE 98
SATISFACTION OF ASPIRATIONS (LINE MANAGER) DISTRIBUTION (%)

		Gender		Department				
desirable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.7	3.6	4.1	3.9	3.8	3.5	3.1	4.1
extremely	39	38	44	37	44	41	23	48
somewhat	16	16	16	27	8	9	19	14
not at all	45	46	40	36	48	50	58	38

3. Systems Engineer (SATASPSE)

TABLE 99
SATISFACTION OF ASPIRATIONS (SYSTEMS ENGINEER)
DISTRIBUTION (%)

		Gender		Department				
desirable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.2	4.2	3.8	4.0	3.8	3.0	4.7	4.5
extremely	49	50	42	36	40	28	67	52
somewhat	19	20	12	32	16	18	11	21
not at all	32	30	46	32	44	54	22	27

4. Technical Consultant (SATASPTC)

TABLE 100
SATISFACTION OF ASPIRATIONS (TECHNICAL CONSULTANT)
DISTRIBUTION (%)

		Gender		Department				
desirable	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.3	4.5	3.5	3.9	4.7	4.0	4.9	4.1
extremely	53	57	32	30	74	50	66	43
somewhat	14	13	16	22	4	17	11	16
not at all	33	30	52	48	22	33	23	41

K. INTEREST IN PURSUIT OF CAREER OPTIONS

Overall, the Technical Consultant career option is the on that most respondents were interested in pursuing. Males and females differed in their interests in the different options as careers. Males found the Technical Consultant path to be the one that most interested them, followed by Program Manager, Systems Engineer, and Line Manager. Females found Line Manager interested them the most, followed by Program Manager, Technical Consultant, and Systems Engineer. Department 900 was most interested in pursuing Program Manager, but was interested in all of the options. Department 800 was most interested by Technical Consultant and Systems Engineer, Line Manager sparked little enthusiasm. Department 700 preferred Technical Consultant and was not interested very much by Systems Engineer. Department 400 was very interested in Technical Consultant, department 200 was interested in the Program Manager option.

1. Program Manager (PURSUEPM)

TABLE 101
INTEREST IN PURSUIT (PROGRAM MANAGER) DISTRIBUTION (%)

		Gender		Department				
interest	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.0	4.0	3.9	4.2	3.4	3.5	3.7	4.5
extremely	48	49	40	50	40	39	41	58
somewhat	10	10	8	14	12	9	11	7
not at all	42	41	52	36	48	52	48	35

2. Line Manager (PURSUELM)

TABLE 102
INTEREST IN PURSUIT (LINE MANAGER) DISTRIBUTION (%)

		Gender		Department				
interest	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	3.7	3.6	4.0	3.6	3.6	3.7	3.0	4.0
extremely	38	38	37	32	36	43	29	45
somewhat	12	11	17	18	12	9	9	11
not at all	50	51	46	50	52	48	62	44

3. Systems Engineer (PURSUESE)

TABLE 103
INTEREST IN PURSUIT (SYSTEMS ENGINEER)
DISTRIBUTION (%)

		Gender		Department				
interest	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.0	4.0	3.4	3.8	3.6	3.0	4.4	4.2
extremely	44	45	32	36	32	30	53	49
somewhat	14	16	8	23	16	13	14	11
not at all	42	39	60	41	52	57	33	40

4. Technical Consultant (PURSUETC)

TABLE 104
INTEREST IN PURSUIT (TECHNICAL CONSULTANT)
DISTRIBUTION (%)

		Gender		Department				
interest	overall	male	female	200	400	700	800	900
n	174	147	26	23	27	27	46	45
mean	4.3	4.4	3.5	3.7	4.7	4.0	4.7	4.1
extremely	50	54	29	35	70	46	56	47
somewhat	10	10	13	22	0	8	14	7
not at all	40	36	58	43	30	46	30	46

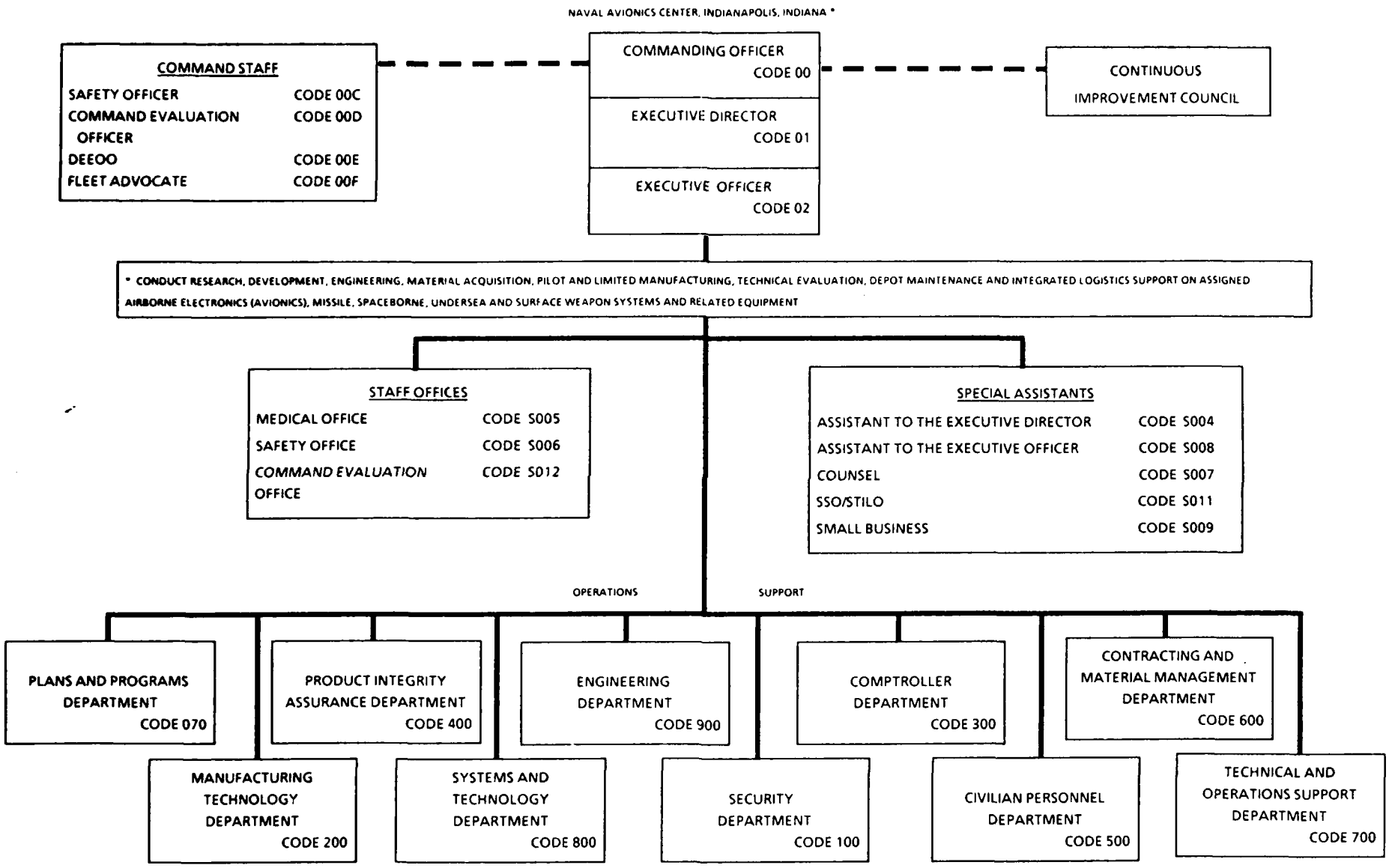
SUMMARY

There is a lot of information contained in the above tables. The most desirable career options for males were Technical Consultant and Systems Engineer, which were also the two options that males felt most knowledgeable about. In addition, males felt that these two options were the most attainable, and would most satisfy their career aspirations; yet males also said that Program Manager was equally as interesting to them to pursue as a career option as Systems Engineer, even though they stated that they were not at all knowledgeable about Program Manager as a career. Females felt that Line Manager was the most desirable and the one they were most knowledgeable about. In addition, they felt that Line Manager was the most attainable option and the one that they were most interested in pursuing, yet they also stated that Program Manager would be the most likely career option to satisfy their

career aspirations. As can be seen, males and females differed considerably in their career interests and satisfactions. In addition, it appears that knowledge and information concerning career alternatives, which appear to be lacking at the Center, are the key basis for determining the desirability of, and the interest in, particular career paths.

APPENDIX A

NAVAL AVIONICS CENTER ORGANIZATIONAL CHART



17 JUL 89	APPROVED: R/H Lemus CAPT, USN, COMMANDING OFFICER	NAVAL AIR SYSTEMS COMMAND	NAVAL AVIONICS CENTER INDIANAPOLIS, INDIANA	CHART NO. 00

APPENDIX B

NAVAL AVIONICS CENTER DIAGNOSTIC SURVEY

NAC DIAGNOSTIC SURVEY

The purpose of this questionnaire is to identify issues within NAC concerning job attributes, work group attributes, and career development. It is an opportunity to take stock of NAC as a place to work, to spend a career, and to register your observations, concerns, and satisfactions on a number of topics.

This questionnaire was custom designed for NAC and its' scientist and engineer communities. A few questions are standard questions addressing issues that are central to the operation of any organization. But, most of the items reflect issues of specific concern to NAC as identified through interviews. These issues were identified as potential problem areas or as success areas. This survey will allow us to see how the scientist and engineer communities feel about these issues.

After the surveys are collected, results will be tabulated and a report will be prepared which summarizes the findings.

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GENERAL INSTRUCTIONS

1. These surveys are meant to be <u>completely</u> anonymous and confidential. Individual responses will not be seen by anyone within this organization. Do not put any identifying marks of any kind on them. When completed, please place the survey in the envelope provided and seal the envelope. Then return the survey and envelope to your departmental/divisional POC.

2. Most of the questions ask that you check one of several numbers that appear on a scale to the right of the item. You are to choose one number that best matches the description of how you feel about the item. For example, if you were asked "How much do you enjoy the weather in this area", and you are generally satisfied with the weather, you would check the number under "satisfied" like this:

	very dissatisfied	dissatisfied	slightly dissatisfied	not satisfied or dissatisfied	slightly satisfied	satisfied	very satisfied
How much do you enjoy the weather in this area?. . . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)

Note that the scale descriptions may be different in different parts of the survey. For example, they may ask you haw much you agree or disagree with something, or how satisfied or dissatisfied you are with something, or wether you think something is likely or unlikely to occur. Be sure to read the scale descriptions carefully for each section before choosing your answers.

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DEMOGRAPHICS

The following information is needed to help us with the statistical analyses of the data. This information will allow comparisons to be made among different groups of employees.

PLEASE ANSWER EACH QUESTION BY MARKING THE NUMBER NEXT TO THE DESCRIPTION WHICH BEST FITS YOU OR BY WRITING IN THE CORRECT INFORMATION.

1. Are you (check one):

   (0)____ Female
   (1)____ Male

2. How old were you on your last birthday?

   _____ years

3. How many years have you worked at NAC?

   _____ years

4. What is the highest level of education you have attained?

   (1) High school diploma
   (2) Assoc/Jr college degree
   (3) Bachelor's degree
   (4) Master's degree
   (5) Doctoral degree

5. Are you currently married?

   (0)____ no
   (1)____ yes

6. Do you have dependents? (excluding your spouse)

   (0)____ no
   (1)____ yes

7. Your department/division is?

   _____/_____

8. Your paygrade is?

   GS- _____

9. Is your spouse currently employed outside of the home?

   (0)____ no
   (1)____ yes
   (3)____ N/A

10. What was your last performance rating?

    _____

11. Have you actively pursued alternative employment opportunities within the past year?

    (0)____ no
    (1)____ yes

YOUR JOB

This section asks you how you think and feel about certain aspects of your job.

1. How satisfied are you with:	very dissatisfied	dissatisfied	slightly dissatisfied	not satisfied or dissatisfied	slightly satisfied	satisfied	very satisfied
a. current job overall. . . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
b. fringe benefits you receive.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
c. coworkers/work group . . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
d. amount of freedom you have on your job . . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
e. opportunities for your own professional learning and growth. . . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
f. opportunities to accomplish something worthwhile	(1)	(2)	(3)	(4)	(5)	(6)	(7)
g. your amount of pay	(1)	(2)	(3)	(4)	(5)	(6)	(7)
h. the chances you have to take part in decisions . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
i. your job security.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
j. promotion opportunities. .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
k. assignment stability . . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
l. opportunities to receive training	(1)	(2)	(3)	(4)	(5)	(6)	(7)
m. the current bonus system .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
n. opportunities to work with state of the art equipment	(1)	(2)	(3)	(4)	(5)	(6)	(7)
o. career path opportunities.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

2. How much do you agree or disagree with the following:	strongly disagree	disagree	slightly disagree	do not agree or disagree	slightly agree	agree	strongly agree
a. In general, I like my job .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
b. I will probably look for a new job in the next year	(1)	(2)	(3)	(4)	(5)	(6)	(7)
c. What happens to the organization is really important to me	(1)	(2)	(3)	(4)	(5)	(6)	(7)
d. It would be hard for me to leave my job even if I wanted to.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
f. I feel personnally responsible for the work I do . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
g. There is poor communication between different parts of NAC	(1)	(2)	(3)	(4)	(5)	(6)	(7)
e. I often think of quitting.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

3. How much do you agree or disagree with the following:	strongly disagree	disagree	slightly disagree	do not agree or disagree	slightly agree	agree	strongly agree
a. Management makes it easy to get the job done	(1)	(2)	(3)	(4)	(5)	(6)	(7)
b. There is enough variety in my job	(1)	(2)	(3)	(4)	(5)	(6)	(7)
c. My job is challenging. . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
d. Considering my skills and effort I put into my work, I am satisfied with pay. .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
e. There is to much stress on my job.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

4. How likely is it that:	very unlikely	unlikely	neither likely or unlikely	likely	very likely
a. You could find an equal or better job at another organization.	(1)	(2)	(3)	(4)	(5)
b. You will look for a new job in the next 12 months	(1)	(2)	(3)	(4)	(5)
c. You will get a bonus or pay raise if you perform your job particularly well	(1)	(2)	(3)	(4)	(5)
d. You will be promoted to the next higher grade	(1)	(2)	(3)	(4)	(5)
e. You will remain at NAC for at least five more years	(1)	(2)	(3)	(4)	(5)
f. You will receive feedback from your supervisor(s) concerning your performance . . .	(1)	(2)	(3)	(4)	(5)
g. Your family would be better off if you took a new job	(1)	(2)	(3)	(4)	(5)
h. You will remain at NAC until retirement.	(1)	(2)	(3)	(4)	(5)

WORK GROUPS

This section asks you what you think about various work groups.

1. For your department, how much do you agree or disagree with the following:	strongly disagree	disagree	slightly disagree	do not agree or disagree	slightly agree	agree	strongly agree
a. I feel I am really a part of my work group.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
b. People who offer new ideas are likely to get "clobbered" . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
c. Each member has a clear idea of the group's goals	(1)	(2)	(3)	(4)	(5)	(6)	(7)
d. Everyone is involved in the decision making	(1)	(2)	(3)	(4)	(5)	(6)	(7)
e. My co-workers are afraid to express their real views. . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
f. Some of the people I work with have no respect for others. .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
g. Everyone's opinions gets listened to in my group . . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
h. morale is high.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

2. For your division, how much do you agree or disagree with the following:	strongly disagree	disagree	slightly disagree	do not agree or disagree	slightly agree	agree	strongly agree
a. I feel I am really a part of my work group.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
b. People who offer new ideas are likely to get "clobbered" . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
c. Each member has a clear idea of the group's goals	(1)	(2)	(3)	(4)	(5)	(6)	(7)
d. Everyone is involved in the decision making	(1)	(2)	(3)	(4)	(5)	(6)	(7)
e. My co-workers are afraid to express their real views. . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
f. Some of the people I work with have no respect for others. .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
g. Everyone's opinions gets listened to in my group . . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
h. morale is high.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

GENERAL

This section asks what you think and feel concerning several areas.

1. How much do you agree or disagree with the following:	strongly disagree	disagree	slightly disagree	do not agree or disagree	slightly agree	agree	strongly agree
a. Morale is good at NAC	(1)	(2)	(3)	(4)	(5)	(6)	(7)
b. Working environment/conditions are satisfactory	(1)	(2)	(3)	(4)	(5)	(6)	(7)
c. I am satisfied with my life at NAC	(1)	(2)	(3)	(4)	(5)	(6)	(7)
d. My family could be better off if I left NAC.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
e. Working at NAC is about what I expected it would be	(1)	(2)	(3)	(4)	(5)	(6)	(7)
f. Pay raises/promotions depend on performance	(1)	(2)	(3)	(4)	(5)	(6)	(7)

2. Please answer the following:

a. The pay for my present job is:

(1) (2) (3) (4) (5) (6) (7)

less than I really need to live — enough to meet my needs — much more than my needs require

b. How important is pay to you?

(1) (2) (3) (4) (5) (6) (7)

unimportant — moderately important — important

c. Have you received other job offers in the past 12 months?

(0)____ no
(1)____ yes

d. How many more years do you intend to work at NAC?

____ <1
____ 1-3
____ 4-6
____ 7-9
____ 10-12
____ 13-15
____ 16+

CAREER DEVELOPMENT

This section asks you how you think and feel about various aspects concerning career development.

1. How satisfied are you with:	very dissatisfied	dissatisfied	slightly dissatisfied	not satisfied or dissatisfied	slightly satisfied	satisfied	very satisfied
a. the career options available to you	(1)	(2)	(3)	(4)	(5)	(6)	(7)
b. the career development program at NAC	(1)	(2)	(3)	(4)	(5)	(6)	(7)
c. the amount of information that is available to me concerning career paths	(1)	(2)	(3)	(4)	(5)	(6)	(7)
d. the availability of career guidance	(1)	(2)	(3)	(4)	(5)	(6)	(7)

2. Please answer the following:

a. to what extent do the career options available at NAC satisfy your career goals?

(1)	(2)	(3)	(4)	(5)	(6)	(7)
career options are inadequate to meet my needs			career options adequate to meet my needs			career options are more than adequate to meetmyneeds

b. how familiar are you with the availabale career options?

(1)	(2)	(3)	(4)	(5)	(6)	(7)
I know little about my career options			I am fairly well informed about my career options			I am very well informed about my career options

c. Rank the following in order of importance to you (1 = most important, 5 = least important):

My job/career at NAC appeals to me because it allows/ will allow me the opportunity to:

_____ develop and utilize technical skills
_____ develop and utilize managerial skills
_____ develop and utilize creative skills
_____ work in an autonomous setting
_____ have job security

3. The following section asks you questions concerning your knowledge and understanding of, and satisfaction with, your career options at NAC- program manager, line manager, systems engineer, and technical consultant/engineer. If you are already in a "track", then please arswer the questions "in hindsight".

	not at all		some what		quite		extremely
a. How knowledgeable are/were you about the career options available to you at NAC?							
(1) program manager.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(2) line manager	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(3) systems engineer	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(4) technical consultant . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
b. How attainable is/was each career option for you?							
(1) program manager.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(2) line manager	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(3) systems engineer	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(4) technical consultant . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
c. How desirable is/was each career option for you?							
(1) program manager.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(2) line manager	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(3) systems engineer	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(4) technical consultant . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
d. To what extent is/would each career option be able to satisfy your career aspirations?							
(1) program manager.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(2) line manager	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(3) systems engineer	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(4) technical consultant . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)
e. To what extent are/were you interested in pursuing a career in each option available to you at NAC?							
(1) program manager.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(2) line manager	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(3) systems engineer	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(4) technical consultant . .	(1)	(2)	(3)	(4)	(5)	(6)	(7)

4. Please answer the following questions:

a. What factors do you consider to be the most important in selecting a career path option?

b. Which of the available career paths is most attractive, and why?

c. What improvements could be made in the career development process at NAC?

d. What are the most satisfying aspects of your job and working at NAC?

e. What are the least satisfying aspects of your job and working at NAC?

THANK YOU FOR YOUR COOPERATION IN SPENDING TIME TO ANSWER OUR QUESTIONS.

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